VILLAGE OF BURR RIDGE PUBLIC WATER SUPPLY 2004 CONSUMER CONFIDENCE REPORT



The Village of Burr Ridge, in compliance with The Safe Drinking Water Act (SDWA), is issuing this year's Consumer Confidence Report (CCR) for the period of January 1 to December 31, 2003. This report is intended to provide you with important information about the quality and source of your drinking water. During 2003, the water provided by the Village met all USEPA and state drinking water quality standards and we are pleased to report that there were no violations during

this period. The Village diligently monitors the water distribution system taking a minimum of 10 samples for bacteriological testing each month. We are committed to providing you with the safest and most reliable water supply possible. If you have any questions about this report or concerns about your water system, please contact James Lukas, Water and Sewer Division of the Village of Burr Ridge Public Works Department at (630) 323-4733 ext. 454.

SOURCE WATER

Burr Ridge uses water from Lake Michigan, treated by the City of Chicago, and purchased from the Village of Bedford Park. We also have three stand-by wells that **were not used** during 2003. These wells are tested and maintained in working order and are intended to be used **in case of emergency only**.

Lake Michigan is a surface water supply used to provide drinking water for Chicago and over 123 suburban communities. The Environmental Protection Agency (EPA) has found that the quality of Lake Michigan has improved dramatically over the past 25 years. Lake Michigan serves as a source of drinking water, as a place for swimming and fishing, and is utilized for both recreational boating and commercial shipping. All 63 miles of shoreline within Illinois are considered to be in good condition by the EPA. Further information on our community water supply's source water assessment is available on the USGS web site at www.usgs.gov, the Illinois Environmental Protection Agency (IEPA) at www.epa.state.il.us/water, the City of Chicago Department of Water Management at www.cityofchicago.org/WaterManagement or by calling the Groundwater Section of the Illinois EPA at (217) 785-4787.

The sources of drinking water in Illinois (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminants</u>, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems;
- <u>Radioactive contaminants</u>, which may be naturally occurring or be the result of oil and gas production and mining activities.

The regulations in place restrict industrial and sewage treatment plant effluents from entering Lake Michigan, thereby reducing the risk of having these contaminants in the water.

In order to ensure that tap water is safe to drink, the USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791)

ABOUT THE DATA AND DATA TABLE FOOTNOTES

Turbidity – Turbidity is a measure of the cloudiness of the water. Chicago monitors it because it is a good indicator of water quality and the effectiveness of their filtration system and disinfectants.

Lead – Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than in other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to flush your tap for 30 seconds to 2 minutes before using the water, or have your water tested by an independent laboratory. Testing for lead done by the Village of Burr Ridge shows results either not detectable or well below the Action Level. Additional general information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).

Asbestos – Chicago examines samples for asbestos fibers on a routine basis. The EPA has determined that asbestos fibers greater than 10 microns in length could potentially cause lung cancer. They do not find fibers that are in this size category.

Haloacetic acids – Additional disinfectant by-products are being monitored. Chicago began analyzing for these compounds in July, 1998. In December, 1998 the rule was finalized which set an MCL for HAAs at 60 ppb. Thus far, testing shows that Chicago is averaging 11.8 ppb, which is comfortably below the regulated level. The range of detections was 8.0 - 22.0 ppb. The Village of Burr Ridge also monitors for these by-products and our testing also shows results well below the regulated level.

Cryptosporidium – Analyses have been conducted monthly on the sources water since April, 1993. Cryptosporidium has not been detected in these samples. Treatment processes have been optimized to ensure that if there are cryptosporidium cysts in the source water, they will be removed during the treatment process. By maintaining a low turbidity and thereby removing the particles from the water, the threat of cryptosporidium organisms getting into the drinking water system is greatly reduced.

Fluoride – Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l.

Sodium – There currently is not a state of federal Maximum Contaminant Level for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Voluntary testing – The Chicago Water Department and the Village of Burr Ridge both monitor for contaminants, which are proposed to be regulated, or for which no standards currently exist but which could

provide useful information in assessing the quality of the source water or the drinking water.

Unregulated Contaminants – A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

DEFINITION OF TERMS

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Level Found: This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

Date of Sample: If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in this column, monitoring for this contaminant was conducted during the CCR calendar year.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Violation (V): If a violation had occurred an explanation of the violation and corrective measures taken would be explained in the informational section of this report.

Nd: Not detectable at testing limits.

Na: Not applicable.

Units of Measure: ppb – parts per billion, or micrograms per liter; ppm – parts per million, or micrograms per liter; NTU – Nephelometric Turbidity Unit, used to measure cloudiness in drinking water; %>0.5 NTU – Percent samples less than 0.5 NTU; pCi/1 – Picocuries per liter, used to measure radioactivity.

2003 VIOLATION SUMMARY TABLE VILLAGE OF BURR RIDGE AND CITY OF CHICAGO

Violation Types:

- MNR Monitoring Violation (failure to monitor)
- MCL Maximum Contaminant Level Violation (level found exceeded regulated standard)
- TTV Treatment Technique Violation (failure to meet water treatment process)
- RPV Reporting Violation (failure to submit results/required report by the deadline)
- *** State only violation (not a federal requirement)

CITY OF CHICAGO 2003 WATER QUALITY DATA

DETECTED CONTAMINANTS

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Level found	Range of detections	Violation	Date of sample
Microbial Contaminants						
TURBIDITY (%>0.3 NTU) Soil runoff. Lowest monthly percent meeting limit.	n/a	TT	100.000%	n/a		2003
TURBIDITY (NTU) Soil runoff. Highest single measurement.	n/a	TT=1NTUmax	0.250	n/a		
Inorganic Contaminants						
BARIUM (ppm) Discharge of drilling wastes, from metal refineries; erosion of natural deposits.	2	2	0.020	0.019 - 0.020		
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	10	10	0.357	0.305 – 0.357		
NITRATE & NITRITE (ppm) Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	10	10	0.357	0.305 – 0.357		
Disinfectants/Disinfection By-Products						
TTHMs (TOTAL TRIHALOMETHANES) (ppb) By-product of drinking water disinfection.	n/a	80	17.300	7.200 – 28.100		
HAA5 (HALOACETIC ACIDS) (ppb) By-product of drinking water disin fection.	n/a	60	9.100	6.700 – 12.800		
CHLORINE (as CI2) (ppm) Drinking water disinfectant.	4.0	4.0	1.32	0.02 – 1.32		
TOC [TOTAL ORGANIC CARBON] The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by IEPA.						
Unregulated Contaminants						
SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	17.200	15.600 – 17.200		
BORON (ppb) Erosion of naturally occurring deposits; used in detergents, as water softener, in production of glass, cosmetics, pesticides, fire retardants and for leather tanning.	n/a	n/a	33.00	31.000 – 33.000		
State Regulated Contaminants						
FLUORIDE (ppm) Water additive which promotes strong teeth.	n/a	n/a	0.960	0.910 – 1.004		
SODIUM (ppm) Erosion of naturally occurring deposits; used as water softener.	n/a	n/a	7.00	6.900 – 7.000		
Radioactive Contaminants						
BETA/PHOTON EMITTERS (pCi/I) Decay of natural and man-made deposits.	0	50	2.00	nd – 2.000		11/5/01

VILLAGE OF BURR RIDGE 2003 WATER QUALITY DATA

DETECTED CONTAMINANTS

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Level found	Range of detections	Violation	Date of sample
Microbial Contaminants						
TOTAL COLIFORM BACTERIA (# positive samples/month) Naturally present in the environment	0	>1	nd			monthly

VILLAGE OF BURR RIDGE 2003 WATER QUALITY DATA

DETECTED CONTAMINANTS

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	Action Level (AL)	90 th Percentile	# of Sites Over AL	Date of Sample
Inorganic Contaminants					
LEAD (ppb) Corrosion of household plumbing systems, erosion of natural deposits. Naturally present in the environment	0	AL=15 ppb	3	0	2003
COPPER (ppm) Corrosion of household plumbing systems; erosion of natural deposits.	1.3	AL=1.3ppm	0.05	0	2003

Regulated Contaminant	Highest Level	Range of Levels	MCLG	MCL	Violation	Date of sample
Disinfectants/Disinfection By-Products						
TTHMs [TOTAL TRIHALOMETHANES] (ppb) By-product of drinking water chlorination.	44	23 – 44	n/a	80*	No	2003
TOTAL HALOACETIC ACIDS (HAA5) (ppb) By-product of drinking water chlorination	17	10.6 – 16.9		60*	No	2003

^{*}MCL Statement: The maximum contaminant level (MCL) for TTHM and HAA5 is 80 ppb and 60 ppb respectively, and is currently only applicable to surface water supplies that serve 10,000 or more people. These MCLs became effective 1/1/2004 for all groundwater supplies and surface water supplies serving less than 10,000 people. Until 1/1/2004, surface water supplies serving less than 10,000 people, any size water supply that purchased from a surface water source and groundwater supplies serving more than 10,000 people must have met a state imposed TTHM MCL of 100 ppm. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous system, and may have an increased risk of developing certain cancers.

CONSUMER EDUCATION:

FREQUENTLY ASKED QUESTIONS

(COURTESY OF THE CITY OF CHICAGO)

What is the hardness of the water?

The hardness of Chicago water is approximately 8 grains (140 ppm).

What is the fluoride content of the water?

The fluoride content of Chicago water averages 1 milligram per liter (1 ppm). The USEPA has determined that this amount is helpful in preventing tooth decay.

Why does the water have a chlorine taste or smell? How can I improve it?

Chlorine is a disinfectant used to kill bacteria during the treatment process and to prevent regrowth of bacteria in the water distribution system. To remove the chlorine taste of smell, fill a pitcher of water and refrigerate overnight.

What cause the milky-white, cloudy appearance of my water during the winter months?

Cold water holds more dissolved oxygen than warm water. As cold water enters your home it is warmed as it sits in the interior pipes. This forces the dissolved oxygen out of the water in the form of bubbles, which makes the water seem cloudy. Running the water for a short period of time will eliminate this condition.

VILLAGE OF BURR RIDGE 7660 S. COUNTY LINE ROAD BURR RIDGE, IL 60527

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2004 Consumer Confidence Report

Important Information
Regarding the
Village of Burr Ridge
Drinking Water Supply